

Summary

Base Metal Mining, Zinc, Nickel, Lead, Cobalt and Copper, is experiencing extremely high levels of new investment due to the fact that spot and futures prices of base metals have increased significantly during the past year. Accordingly, a number of base metal mining projects that were unfeasible during the past five years have now become viable. This provides US manufactures of mining equipment with tremendous opportunities. This report focuses on Zinc, Nickel, Lead and Cobalt. Copper is the focus of an August 2004 US Commercial Service report entitled 'Copper and Gold' found at http://www.buyusainfo.net/docs/x_8404344.pdf.

Industry watchers generally agree that the upward trend of base metal prices is likely to continue over the medium term and conclude that these new, higher price levels are sustainable over the medium to long term.

The belief that these higher levels will continue for some time has led several companies to reassess projects that were previously considered marginal. This report addresses large and medium-sized zinc, nickel, cobalt, and lead mining projects to be implemented by a number of major companies including:

- Companhia Vale do Rio Doce (CVRD).
- Companhia Níquel Tocantins (CNT).
- Votorantim Metals (Votorantim Group).
- Canico Resource Corp. (Canico Group).
- CODEMIN (Anglo Ashanti Group).

Opportunities abound for US exporters and it is estimated that the sector will consume approximately \$68 million worth of new mining equipment and services during the next three years developing new base metal mines in Brazil.

Summary of Estimated Market Segment Sizes

SAG / FAG Mills	\$30 Million
Semi Mobile In-Pit Crushing Circuits	\$12 Million
Hydrometallurgical Extraction Processes	\$15 Million
Advanced Process Control Systems	\$6 Million
Engineering	\$5 Million
TOTAL	\$68 Million

Base Metal Prices: Zinc

Zinc spot prices increased dramatically from US\$ 780 per metric ton (Mt) in March 2003 to US\$ 1,100 per Mt in March 2004. Current spot prices are floating around US\$ 1,300 per Mt. This price increase is due in part to unexpected consumption demand increases coupled with several mine closings.

Industry watchers estimate that mine closures reduced zinc concentrate production by more than 300,000 Mt during 2002. Despite the zinc sector's inventory surplus in 2003, the increase in demand was enough to send spot prices climbing. Although the spot price diminished to US\$ 980 per Mt in September 2004 it has returned to the US\$ 1,300 range.

Indicative of the future, 27-month futures contracts have been fluctuating around US\$ 1,050 per Mt since January 2004 indicating that the market expects the price of zinc to stay above the US\$ 1,000 per Mt level for quite some time. This expectation is driven by the belief that high demand will continue due to anticipated economic growth in the US and further demand increases by China.

Base Metal Prices: Nickel

Nickel spot prices have been steadily increasing from US\$ 5,000 per Mt in September 2001 to a peak of US\$ 16,000 per Mt in March 2004. They have now returned to an average level of about US\$ 104,000 per Mt between April and September 2004.

27-month futures contracts peaked during December 2003 at US\$ 12,500 per Mt and then settled back to around US\$ 10,000 per Mt between March and September 2004. The current futures price is US\$ 13,300 per Mt.

Base Metal Prices: Lead

Lead spot prices have been steadily increasing since September 2003, from approximately US\$ 500 per Mt to US\$1,000 per Mt in June 2005. An analysis of 15-month futures contracts for Lead indicate that prices will continue to float around the US\$ 1,000 per Mt mark during 2005 and will likely trend to US\$1,150 per Mt in the next two to three years.

Base Metal Prices: Cobalt

Cobalt price rose from approximately US\$ 10,000 per Mt in 2003 to about US\$ 37,000 per Mt in June 2005.

Current and Planned Base Metals Projects

The main objective of this report is to discuss the main features of the Brazilian base metal mining sector, particularly new mine development, in order to identify market potential for US equipment, technology, and engineering suppliers over the next three years.

Companhia Vale do Rio Doce (CVRD) - Nickel

CVRD, Brazil's largest mining firm expects to have the Vermelho nickel project in operation by the year 2008. The estimated investment for this project amounts to US\$ 700 million. Situated in the Carajás region, in the northern Brazilian state of Pará, the deposit has approximately 220 million Mt of lateritic mineralization that has an average nickel content of 1.23%. The project is expected to produce 45,000 Metric tons per year (Mtpy) of nickel. Extensive use of hydrometallurgical technology is envisioned.

Canico - Nickel

The feasibility study for Canico's Onça Puma nickel project located in the state of Pará is being finalized by the Canadian consulting company Hatch working in consortium with the Brazilian construction company Consultora Odebrecht. The project is divided into two stages. The first stage is anticipated to start up in September 2007. The CAPEX is estimated at US\$ 1.25 billion, while the mineable resources have been estimated at 104 million Mt of lateritic mineralization, which will provide an estimated annual production of 60,000 Mtpy of ferro-nickel alloy. It is expected that 100% of the mine's production will be exported. The first stage will generate 34,000 Mtpy of ferro-nickel alloy. Mineable resources indicate a project life of 68-years based on the proposed production rate currently being considered. Canico is currently negotiating with CVRD to gain access of CVRD's Carajás railroad for the transportation of its ferro-nickel alloy product from the project site in Marabá in the state of Pará to the Itaquí harbor in the state of Maranhão.

Prometalica – Zinc, Nickel, Lead

Prometalica has two projects aimed at the production of zinc, nickel, and lead. Both projects, the Monte Cristo and the Americano do Brasil, will be underground mines, thereby creating a market for equipment and expertise associated with this kind of operation.

The Monte Cristo project, located in the municipality of Rio Branco, in the Center-West state of Mato Grosso, will produce 31,000 Mtpy of zinc concentrate, 10,500 Mtpy of Copper concentrate, and 4,300 Mtpy of Lead concentrate. These volumes imply total mining and treatment of approximately 270,000 Mtpy of ore. The estimated CAPEX of the Monte Cristo project is US\$ 12.6 million with a mine life of four years. Originally, an area of 876 ha was granted to this project for exploration and exploitation. Subsequently, the company secured additional exploration rights for a 10,000 ha area adjacent to the original concession area. Prometalica has also applied for exploration and mining licenses for another three areas contiguous to the original project area, totaling approximately 20,000 ha. It is important to note that the areas

are believed to be located in a greenstone belt that offers high possibility of mineralization.

Prometalica's second project is situated in the municipality of Americano do Brasil in the state of Goiás. It is believed that this project will produce approximately 34,000 Mtpy of nickel concentrate (6 percent of nickel by weight) and 15,000 Mtpy of Copper concentrate (30 percent of copper by weight), implying the mining and treatment of 560,000 Mtpy of ore. The estimated CAPEX for this project is US\$ 25 million.

Companhia Níquel Tocantins (CNT) – Nickel, Cobalt

CNT, part of Votorantim Metais, produced 19,700 Mt of nickel metal in 2004 and plans to produce 21,900 Mt in 2005. Domestic sales were 7,400 Mt in 2004 with the remainder being exported. An investment plan is currently underway to increase production to 22,800 Mtpy of nickel and 1,420 Mtpy of cobalt, by 2006. CNT is currently Brazil's largest nickel producer, accounting for 72% of the country's total output. The company currently sells 60% of its production abroad.

CODEMIN (Anglo Ashanti Group) – Nickel

Codemin produced 6,500 Mt of nickel in 2004 and its planned output for 2005 is 10,000 Mt. The company is scheduled to complete a feasibility study by the end of this year at the Barro Alto Project in the state of Goiás, which may have the potential for production of 40,000 Mtpy of nickel in ferro-nickel, by 2009.

Castillian Resources / Falconbridge – Nickel

Industry watchers report Toronto-based junior Castillian Resources (TSX-V: CT) has reached an agreement with the Brazilian subsidiary of Toronto-based Falconbridge (TSX: FL) to buy a 50% interest in Falconbridge's Mangabal Nickel Project in the state of Goiás. Castillian stated that it will pay US\$18 million in installments until December 2009 to increase its participation in the project. These funds will be used to explore the 765 km² property.

Falconbridge Brasil, who will be the project operator, has already budgeted US\$ 2 million for 2005 exploration targets. The 2005 exploration program includes the follow-up of drill-ready targets, a 7,500 m diamond drilling effort and additional geophysical surveying. Historical drilling done by Metago, a Goiás state government agency, included the following intersections: 6.3 m at 1.56% nickel and 0.55% copper; 4 m at 1.73% nickel and 0.24% copper; and 10 m at 0.53% nickel and 0.41% copper including 0.7m at 3.19% nickel and 3.77% copper.

Castillian is currently about to complete its due diligence, and is subject to approval by the TSX Venture Exchange (TSX-V). Castillian will issue 2.02 million units equal to one share and one warrant to Falconbridge on completion of due diligence and approval by TSX-V. The warrant is exercisable at 125% of market price on the date of issue and valid for two years. The firm is the target of a takeover bid by its parent company Noranda, which currently holds a 58.5% stake.

Best Prospects: Semi Autogenous and Full Autogenous Grinding Mill Circuits

Semi-mobile plants (one of the fortes of US firms) could be advantageously used in the smaller projects heretofore mentioned.

Even though the process route for the Vermelho project is not yet defined it is more than likely that extensive hydrometallurgy will be used. Demand for flotation equipment is envisioned, be it mechanical flotation cells or column flotation and reagents. Along with this, given the tonnage of ore to be treated, a SAG mill will likely be used in circuit with ball mills.

The first stage of Prometalica's Monte Cristo project will likely have three crushing stages followed by three milling stages. It will make extensive use of proprietary flotation technology owned by Votorantim CMM Metais / Prometalica that avoids the use of sodium cyanide to separate copper from lead in the flotation circuit.

Even though the majority of the equipment for the project's current phase has already been purchased, there are still significant opportunities for US suppliers for future expansions in the neighboring areas also licensed to Prometalica. Given the magnitude of these new areas and the increased knowledge of their geology, it is forecasted that the project will likely double its production once the new areas have been explored. US firms will have a competitive advantage in the supply of equipment for future stages of the project. However, they will face fierce local competition, particularly with respect to control equipment, due to the fact that mechanical equipment can be reutilized or built in Brazil for an expansion. Although this equipment will be less efficient than US equipment, Brazilian firms can compete on price.

The process route for Prometalica's Americano do Brasil has still not been defined. However, it is expected that extensive use of hydrometallurgical technology will be made. As well, it is also expected that the comminution technology utilized will be jaw and cone crushers followed by ball mills.

Americano do Brasil will not make use of any proprietary technology, thus leaving the door open to what the international market has to offer in terms of hydrometallurgical technology. It will be important for US hydrometallurgical technology suppliers to work along with Americano do Brasil professionals in order to offer solutions tailored to the particular characteristics of the ore and to integrate the process with the project's control scheme.

It is believed that CVRD's Vermelho project will require SAG/FAG - Ball Mill circuits. We estimate that the size of Brazil's SAG/FAG - Ball Mill circuit for the next five years (based on the Vermelho project and two similar circuits for Canico's Onça Puma nickel project) will conservatively amount to approximately US\$ 30 million, considering an average cost of US\$ 10 million per unit for a SAG / FAG mill (equipment and technological fees included). This figure does not take into account other equipment that may be an integral part of the comminution circuits, such as pebble crushers and large ball

mills, as they will likely be supplied (under license) by local Brazilian suppliers.

The main factors affecting the competition in this market are:

- Reputation in Brazil as being a reliable supplier of this kind of equipment.
- Proven track record of successful implementation of equivalent grinding mills with similar ores and feed rates.
- Reliability of the equipment and operating parameters very close to those offered in the contract.
- Solid technical assistance to the client during test work and pilot plant phases. Strong track record of technical assistance with other clients is paramount.
- Price will definitely play a major role in this market due to the relatively high cost of comminution equipment.

Presently there are no Brazilian SAG Mill suppliers but the local industry can manufacture most of the components under license with the exception of the last generation of liners and drives (gearless). Few Brazilian firms master throughput technology that minimizes power draw and metal consumption (liners and balls). US suppliers will be competing with Canadian, Swedish, and Finish technology-holders and manufacturers, most of whom have large and well-structured fabrication facilities in the US.

Best Prospects: Semi Mobile In-Pit Crushing Circuits Long Distance Conveyor Belts

There has been an unequivocal trend in the mining industry to use Semi-Mobile In-Pit Crushers (SMIPC) and Long Distance Belt Conveying Systems (LDBCS) that will transport the ore to the mineral processing plant for secondary crushing. The use of SMIPC/LDBCS against truck haulage to a plant-located primary crusher depends heavily on the characteristics of the pit. Generally, deeper pits favor the use of SMIPC/LDBCS. In fact, capital investment for a truck fleet is lower than that for a comparable conveyor system. However, higher operating costs negate this advantage within four to five years. The longer the life of the project, the more favorable a conveyor system becomes. This is particularly true for deep pits or pits that will rapidly deepen.

The Vermelho project will begin as an open pit mine, with the possibility of going underground if the mineralization so warrants. If this is the case, Semi-Mobile In-Pit Crushers will likely be used. It is not yet possible to determine whether trucks or LDBCS will be used until the shape of the pit is known.

Regarding the Monte Cristo and the Americano do Brasil projects, there are two possibilities to convey the ore between the underground mine and the plant. One is using trucks running in a transport gallery fed from the production level. The other is to use a belt conveying system that is fed in the transport gallery to transport the ore up to the process plant. This may open the market for belt conveyor systems that require specialized expertise for underground installation / operation.

It is estimated that the market size for the projects being herein analyzed, without the Prometalica projects, will be three SMIPC units over the next five years, with capacities ranging from 600 to 3,000 Mtp. Considering SMIPC unit price of US\$ 4 million, we estimate the market size for this equipment to be approximately US\$ 12 million.

There are virtually no Brazilian suppliers of In-Pit Crushers, nor local companies with a significant experience related to LDBCS. However, there are a number of companies with experience in the design and implementation of belt conveyors for conventional distances, as well as some companies that could jointly supply the elements required to build an LDBCS. This has happened before (e.g.: MBR's Pico / Andaime Terminal LDBCS).

Design code used for belt conveyors in Brazil is US CEMA (Conveyor Belt Equipment Manufacturers Association) and Brazilian companies master most LDBCS calculations and fabrication procedures. Exceptions to this would be starting conditions, modern couplings, tension redistribution, and corded belt segments.

With this in mind, the main factors that will affect competition in the LDBCS market are:

- Mastery of technological aspects specifically associated with long distance belt conveyors.
- Proven track record of successful equipment installation in similar operations is vital.
- Willingness to team up with local construction companies and equipment providers and to take lead on turnkey contracts.
- Pricing and payment (financing) conditions will be a decisive factor, particularly because local firms can master most of the required technology while providing lower prices when compared to international firms.

The main competitors that US firms are likely to face are German firms, which have a big presence in the Latin American mining equipment market. For example, Krupp supplied the long distance conveying system for two projects in Chile (Collahuasi (8,200 Mtp) and Los Pelambres and Radomiro Tomic (9,615 Mtp)).

The situation for the SMIPC market is, by contrast, very similar to that of the market for Semi Autogenous and Full Autogenous Grinding Mills. There are no Brazilian suppliers of this kind of equipment, even though the Brazilian industry masters the processes required to design and build some components for this kind of equipment. As an example, it can be cited that the Brazilian steel industry is technologically well developed and can offer the basic materials required, including steel liners.

Competition will be largely based on the technologies involved in the design of the in-pit crushers in terms of maximum performance, since companies that do not have previous experience and research facilities cannot easily master these technologies.

It is anticipated that the two-shaft soft breaker type of SMIPC will be uncompetitive due to the relatively high hardness of the diverse base metal-bearing ores.

Best Prospects: Hydro-Metallurgical Extraction Processes

The Vermelho project could make use of hydrometallurgical extraction processes given the characteristics of the ore. Similarly, it is known that Monte Cristo will make use of hydrometallurgical extraction and it is highly probable that Americano do Brasil will make use of it as well. Based on the information available at this point, it is difficult to estimate a size for this market because the final decisions on the process routes to be used in the Vermelho and Americano do Brasil projects. A loose "ball-park" estimate indicates a Hydro-Metallurgical market of approximately US\$ 15 million for equipment and associated technological fees.

Nickel and Copper hydrometallurgical extraction process technology is being advanced primarily in the US, Canada, Australia, and South Africa. Again, willingness to work with the client to optimize the process for any specific type of ore will be crucial for winning business. For example, BetzDearborn, in cooperation with CODELCO (Chuquicamata) successfully developed the Deardocox process, which increased leach recovery by 1% to 5%.

It is important for US companies that want to compete in this market segment to invite key personnel to their laboratories and show that they can offer tailored solutions for their needs. A record of successful implementation of hydrometallurgical extraction processes in other similar operations is also vital to succeeding.

Best Prospects: Advanced Mineral Process Control Systems (ACS)

Advanced Mineral Process Control Systems, both at Expert and "Intelligent" (Adaptive) levels, have proved to be extremely helpful tools in optimizing plant performance. Other significant gains are related to online optimization of recoveries, power draw, reagents, uptime, variability, etc. A typical expert-based adaptive control system ranges from US\$ 250,000 to US\$ 1.3 million. Coordination between the transportation system (trucks) and the mining equipment is also vital to minimize idle time of mining equipment. In Brazil, this presents an excellent opportunity for US companies that offer efficient and flexible control systems for medium sized mining companies.

CVRD's nickel project will call for ACS, particularly with respect to crushing, grinding, and concentration. As well, CVRD will most likely adopt the philosophy of optimized coordination between mining and milling with the associated requirements in terms of control systems. CVRD-owned MBR Vargem Grande Iron Ore Project is an example of this.

Likewise, the Onça Puma, Americano do Brasil and Monte Cristo projects will make use of ACS in order to be competitive,

especially since they do not have the benefits of economies of scale. The control systems for these projects will have to be affordable, which will mean the supplier will have to work closely with technical staff to provide solutions for their requirements at the lowest possible cost.

In order for CVRD to be competitive in the nickel market, the efficiencies of future plants must be commensurate with those achieved by international competitors. ACS are being implemented at a very fast pace atop existing regulatory systems in the mining industry in the US, Canada, Australia, South Africa, Sweden, Finland, and Russia. With this in mind, most of CVRD's projects planned for the next few years call for ACS. The market size for this segment is estimated to be approximately twelve units for the projects being herein analyzed. Accordingly, we estimate that approximately US\$ 6 million in Advanced Control Systems will be purchased over the next three years.

There are currently no Brazilian suppliers of expert or intelligent process control systems for the mining industry. US firms will compete with Canadian and Finish firms. It is worth noting that Brazil has made a significant progress in terms of implementing Advanced Control Systems in the past two years (CVRD and RTZ).

The principal factors for competition in this market are:

- Ability to effectively optimize throughput, recovery, and power draw online. This is especially important since sales are generally performed on a success fee basis. Systems including "heavily" Nonlinear Optimizers will have a decisive competitive advantage.
- Reliability of the systems, with some alternative online optimizing control path to avoid under-performance.
- Ability of the system to correctly describe the physical phenomena taking place (rules and models) and to properly configure Neural Network – Predictor Models.
- Excellence in technical assistance and training.
- Due to the nature of these products, a local office staffed with hands-on professionals with proven experience is important.
- The willingness and ability to interface and train personnel to correctly use the system is also paramount.
- The best market strategy seems to be to motivate and establish a good rapport with both operating and managerial echelons.

Best Prospects: Underground Mine Equipment

As previously stated, Americano do Brasil and Monte Cristo projects contemplate underground mining, while Vermelho will start as an open pit mine with the possibility of becoming underground if the ore body warrants it. This opens the market for a variety of types of equipment such as fans for mine ventilation systems, boomers, LHDs and special trucks.

In order to succeed, the supplier will likely need to provide onsite technical staff at the mine location for quite some time. For example, Sandvik Tamrock maintains a team of twelve

technicians in El Teniente working with the maintenance department while new equipment is commissioned.

At this time no definitive estimate regarding the size of this segment can be made. Market size will depend heavily on whether firm's can find used equipment in Brazil and on new laws that forbid the importation of used equipment to Brazil, unless it can be demonstrated that the equipment is nonexistent in the country.

However, it is expected that most equipment will have to be imported or built in Brazil under foreign license, due to the fact that the vast majority of mining in Brazil is surface mining, making it unlikely that a firm will find used underground mining equipment in country.

The two underground mining projects mentioned in this report are not big enough to warrant a massive amount of equipment, but they may provide an opportunity for firm's to showcase their willingness to work with the client and build a reputation for themselves in Brazil.

Generally, due to the fact that the proportion of underground mines in Brazil is low and mainly related to the gold industry, there is relatively little in country experience when compared to the experience of US firms.

As with other mining equipment products, firm reputation is key to succeeding in this market, as is the willingness of suppliers to train operators and maintenance personnel.

The biggest competitors for US firms in this segment are Finnish and German firms, whose equipment has shown to be reliable in other underground mining operations in South America.

End User Analysis

CVRD is by far the largest Brazilian potential end-user of the equipment, technologies, and engineering services studied in this report. It is Brazil's largest mining company, the third largest in the world and accounts for more than 30% of Brazilian mineral production in terms of value. Annual production in 2004 amounted to 211 Million Mt of processed iron ore, 16 million Mt of iron pellets, 2.1 Million Mt of bauxite, 2.7 million Mt of manganese ore, 570,000 Mt of ferro-alloys, 638,000 Mt of processed potassium chloride (KCl), 1.2 Mt of kaolin, 2.5 Mt of alumina, and 435,000 Mt of aluminum metal.

CVRD also holds significant stakes in other companies in Brazil and abroad:

- Iron ore: SAMARCO (jointly owned with BHP), MBR (CVRD purchased CAEMI and now owns about 62% of MBR), former FERTECO mines, former SAMITRI's mines;
- Bauxite: Mineração Rio do Norte;
- Alumina and aluminum: Alunorte, Albrás, Aluvale, Valesul
- Kaolin: Pará Pigmentos (with Mitsubishi);
- Phosphate and fertilizers (Fosfertil);
- Wood, pulp and paper: FRD, Celmar and Cenibra;

- Steel manufacturing: CST, California Steel, Usiminas;
- Ferro-alloys (SIBRA), Silicon-manganese (CPFL), Railways (FCA, EFVM), Sea transportation (Docenave), Energy generation (4.5 MW) and Logistics services;
- Seven iron ore pellet plants in partnership with foreign companies from Italy, Spain, Japan, and Korea.

CVRD was a state-owned company until May 1996 when it was privatized. Total annual sales are nearly US\$ 6 billion, not including its stakes in the above listed minority holdings. CVRD is organized into two separate divisions, the Southern System and the Northern System. The operations of the Southern System include all mines, pelletizing plants, private railways and ports situated in the central / southern part of the country. The operations of the Northern System include all mines, private railways and ports situated within the northern part of Brazil.

Market Access

Although Brazil has made substantial progress in reducing traditional border trade barriers (tariffs, import licensing, etc.), tariff rates in many areas remain high and continue to favor locally produced products. Brazil's barriers to trade are a cause for concern for the US Government and the European Union (EU), both of whom continue to work through regional trade accord negotiations and at the WTO level to influence tariff and non-tariff barriers.

This report touches upon a broad range of trade regulations that may affect US companies seeking to export to Brazil. However, due to ongoing negotiations within the Free Trade Agreement of the Americas (FTAA) and Brazil's de facto leadership of the Southern Cone group Mercosul, the information in this report may become quickly dated.

To read more about Trade Regulations, please click on the report below:

<http://www.focusbrazil.org.br/ccg/chapters/Trade%20regs.pdf>

Trade Shows

The most important mining event in Brazil is the "Exposibram" congress and trade fair sponsored by the Brazilian Mining Institute / IBRAM. It normally features a series of technical seminars and a trade fair. This event will next be held on September 20 to 23, 2005. It is held every two years in Belo Horizonte and is the best opportunity to meet all kinds of companies from this sector in Brazil.

Several other meetings in the mining sector are also organized by IBRAM, and are co-sponsored by the most important companies of the mining sector in Brazil. IBRAM is the leading association of mining companies in Brazil (www.ibram.org.br).

Another important event is the Brazilian Geological Congress, sponsored by the Brazilian Geological Society (www.42cbg.org.br). This event will take place from October 17 to 22, 2004.

Other Resources and Key Contacts

- For more information about export opportunities in this sector contact US Commercial Service Industry Specialist Mauricio Vasconcelos at: mauricio.vasconcelos@mail.doc.gov
- US Country Commercial Guide for Brazil: www.FocusBrazil.org.br/ccg
- US Commercial Service Market Research Worldwide: <http://www.export.gov/marketresearch.html>
- Brazilian Ministry of Mines and Energy (MME): www.mme.gov.br
- Brazilian Mining Institute (IBRAM): www.ibram.org.br
- Brazilian Geological Service (CPRM): www.cprm.gov.br
- CVRD: www.cvrld.com.br
- Brazilian Association of Machinery Manufacturers (ABIMAQ): www.abimaq.org.br
- Brazilian Mineral Production Department (DNPM): www.dnpm.gov.br
- National Association of the Civil Construction Aggregates Producers (ANEPAC): www.anepac.org.br
- Brasil Mineral is a specialized monthly mining magazine, published by Signus Editora: www.signuseditora.com.br
- Minerios is another specialized monthly mining magazine: www.minerios.com.br
- The mining school of the Federal University of Ouro Preto (UFOP) publishes the quarterly REM (Revista Escola de Minas): www.rem.com.br

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